

FLIGHT OPERATIONS SAFETY PROGRAM

LOSS PREVENTION UNIT
OFFICE OF RISK MANAGEMENT
DIVISION OF ADMINISTRATION
OFFICE OF THE GOVERNOR

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FLIGHT OPERATIONS SAFETY PROGRAM

1.100 INTRODUCTION:

The Flight Operations Safety Program is to reduce the number and severity of accidents and thereby minimize the financial impact on state government.

The Office of Risk Management (ORM) has developed a comprehensive Loss Prevention Program as required by R.S. 39:1543.1C for statewide implementation. The Flight Operations Safety Program is part of the overall program. Its purpose is to address safety, control use of aircraft, reduce the state's exposure, reduce the loss expenses, achieve accountability, and meet the requirements of R.S. 39:1543.1F.

The following materials are included as an aid to assist administrators, supervisors, loss prevention coordinators, and agency or unit safety officers in managing and implementing Aircraft safety by state employees. Definitions, forms and departmental waivers are included and described in the appendix.

1.101 PROGRAM GOAL

The State of Louisiana is committed to a continuing, aggressive program of Aircraft safety at all levels of state government. Aircraft safety is intended to increase safety awareness among operators of state aircraft, to minimize the State's exposure to liability and financial losses, and to develop agency accountability for safe flight operations.

1.102 COMPONENTS OF LOUISIANA'S FLIGHT OPERATIONS SAFETY PROGRAM

Agency Safety Policies and Procedures: Each agency is responsible for implementing a Flight Operations Safety Program. This program shall include rules concerning who should be permitted to operate aircraft under the agency's control, flight training, proper maintenance procedures in accordance with FAA regulations, emergency procedures, and proper accident reporting. Policies must outline the roles and responsibilities of managers, supervisors, and employees in aircraft safety. These policies should be issued to all operators and form the basis for the agency's Flight

Safety Program. Only employees authorized by their agency head or designee should operate aircraft for agency business. The Unit of Risk Analysis and Loss Prevention will provide guidance and direction to agencies in the development of effective flight safety policies.

Communication/Organization: The Unit of Risk Analysis and Loss Prevention will work with agencies in setting up the program within the agency.

Training: The Unit of Risk Analysis and Loss Prevention will assist agencies in implementing safety training programs that address the needs of the agency by assisting in identifying training aids and resources that can be used for flight safety.

Accident Analysis: The Office of Risk Management has the authority to investigate any and all accidents of any type. The Unit of Risk Analysis and Loss Prevention¹ will assist Office of Risk Management's Claims Section, upon request, in investigating accidents resulting in a claim. The Unit of Risk Analysis and Loss Prevention also will assist agencies, upon request, in investigating accidents resulting in a claim.

Safety Audits and Record Keeping: The Unit of Risk Analysis and Loss Prevention will assist agencies in reviewing and analyzing the Flight Operation's policy and procedures to determine if the agency's program is properly designed to have the intended impact. Data concerning the type, frequency, and amount of claims will be provided to the agency. By providing this data, the Unit assists the agencies in identifying where losses are occurring and how the losses can be reduced or eliminated.

The cost of insurance coverage assessed to each agency's budget is determined by considering three factors: 1) agency's exposure to risk, 2) frequency and severity of claims, and 3) implementation of a flight operations safety program. Agencies that develop, implement, and adhere to a comprehensive safety and loss prevention plan, approved by ORM Unit of Risk Analysis and Loss Prevention, will be given a five percent (5%) discount of their premium.

2.101 RESPONSIBILITY FOR SAFETY

The Unit of Risk Analysis and Loss Prevention will assist agencies in organizing, directing, implementing, and controlling a flight operations safety program that minimizes the adverse impact of aircraft accidents.

Department and agency heads are responsible for implementation of the flight operations safety program and must stress the importance of the department's safety program to all employees. Department heads or their designees are responsible for reviewing pilot records and identifying employees authorized to operate state aircraft. They are also responsible for annual reviews of all operators to determine whether they should continue to operate state-owned aircraft and to verify that each operator has valid certificates in all areas of flight operation.

Supervisors must identify employees certified for each type of aircraft and flight operation. The departments should make time available for each authorized operator to attend the necessary training courses and check flights. Supervisors are responsible for seeing that all aircraft provided to these employees are in safe operating condition and all airworthiness certificates are posted and current. They must ensure that all aircraft policies and procedures are followed and that reports are submitted on a timely basis. A safe environment should be provided in work areas, shops, ramps, vehicles, aircraft and offices.

Employees who are authorized to operate state owned/leased aircraft are responsible for the safe operation of those aircraft on the ground as well as in the air. They should report any unsafe condition or accident involving the state aircraft to their supervisor and are responsible for having all necessary operator permits for type of aircraft and flight conditions. Employees must report revocation of operator license and notify their supervisors of any FAA citations. They must comply with safety practices and accepted FAA/state procedures in the operation and maintenance of state-owned/leased aircraft.

The Pilot in Command shall adhere to all Federal Aviation Regulations on the operation of a particular aircraft as pilot in command. He shall also be responsible for assuring that adequate measures are taken to afford public protection in the vicinity of aircraft during periods of its operation or expected operation.

The pilot shall not allow passengers to board or disembark from the aircraft

when operating from any airport ramp/heliport/helipad which has other aircraft, auxiliary equipment or vehicles unless a responsible person is in attendance to guide the passengers to a safe area.

- A. Single engine aircraft: The pilot in command shall not allow passengers to load or off-load while the engine is running.
- B. Multi-Engine aircraft: The pilot may not allow passengers to load or off-load with an engine running unless.
 - 1. No engine is running or propeller turning on the side of the aircraft where the main cabin door is located.
 - 2. A least one pilot is at the controls of the aircraft.
 - 3. A crewmember or other qualified person is available to supervise the passengers from outside the aircraft and guide them to a safe area.
- C. Rotary Wing: The pilot may allow passengers to load and off-load with the rotors turning only if the passengers have been thoroughly briefed regarding helicopter safety and the proper way to approach and depart the aircraft.

The pilot in charge of the aircraft shall have complete authority to make all decisions concerning the suitability of weather and landing areas, condition of the aircraft for flight, loading of the aircraft, the manner of the flight and any other factor relating to flight safety.

2.104 USE OF AIRCRAFT:

- 1. Flight Authorization: Flight authorization shall be required from the Agency Head or his designee for all flights using state owned/leased aircraft.
- 2. Pilot Authorization: Agency Heads or their designee may authorize persons for flight if they meet the State pilot qualifications.

3. Passengers: Any employee of the State of Louisiana may ride as a passenger in State owned/leased aircraft while on official state business. Other passengers may be flown on official business only on approval of Agency head.

2.105 HAZARDOUS MATERIAL:

No person may offer or accept a hazardous material for transportation in commerce within the United States unless that material is properly classed, described, packaged, marked, labeled, and in the condition for shipment required by Subchapter 171 of Code of Federal Regulations (CFR) 49.

A: Hazardous Material may be transported via State operated aircraft according to the following criteria:

1. The person intending to ship hazardous material aboard State aircraft shall contact the Office of Aircraft Services Director and obtain approval for each shipment. Items which are carried on a regular basis may be granted a long term approval.
2. The name and telephone number of the person signing the shippers certificate will be presented to the Scheduler/dispatcher and a copy of the shipping papers must accompany the shipment on board the aircraft.
3. The above information will be forwarded to the appropriate aircraft pilot, who will ultimately decide whether the material can be safely handled.
4. Passengers should be made aware that hazardous material or certain equipment (butane lighter fuel, fireworks, compressed gas cylinders, poisons, magnetic material, etc.) should not be carried in passenger baggage.

2.106 PERSONNEL POLICIES

Each agency shall develop personnel policy rules which would apply specifically to employees who operate or are associated with State Aircraft. These rules should address responsibilities and conditions which would contribute, in general, to aviation safety. These rules should address such offenses as use of drugs, drinking of alcoholic beverages, making false or misleading statements regarding employment, falsification of medical records, falsification of flight records, experience, etc. Each appropriate employee should be required to read the Agency rules and his/her signature be affixed to the document substantiating that they have read and understand their obligations. Violations of these rules, depending upon the circumstances, could be grounds for termination of employment, termination of flight duty, or other disciplinary action.

2.107 PILOT QUALIFICATIONS

All pilots acting as pilot in command on state-owned or leased aircraft should have the following minimum qualifications:

- A. Currently employed by the State of Louisiana.
- B. Contracted by the State of Louisiana as a pilot and on duty status.
- C. Hold a current FAA Commercial Pilot Certificate in the type and class rating for the aircraft he/she is assigned to fly. Copy of certificate must be on file in pilot records.
- D. Possess a current Medical Certificate with E.K.G. Copy of certificate must be on file in pilot records.
- E. Show evidence of a current biannual flight review. Ref. FAR 61.57 Copy must be on file in pilot records.
- F. Have on file evidence of a Pilot Proficiency Flight Check by Agency's Chief Pilot or Chief Pilot from another Agency.
- G. Pilot must meet FAR Part 61 Standards.

- H. Have on file with Office of Risk Management a completed Pilot History Form with a copy in Pilot's file. This must be completed and filed annually by October 31 each year.
- I. Any additional requirements as established by each Agency especially if aircraft is operated under extreme conditions.
- J. Helicopter pilots shall have, in addition to above, a minimum of 1000 total hours flight time including 250 hours in rotorcraft.

3.100 OPERATIONS

3.101 STANDARD OPERATING PROCEDURES

Pilot personnel employed by the State of Louisiana will use Standard Operating Procedures (SOPs) as established by Federal Air Regulations, the Aircraft manufacturer's operating handbooks, and the Agency's Flight Operations Manual. Aircrew discipline and effective training will insure adherence to the standard procedures and add an inestimable safety factor to all flight operations.

In general, the following minimum standard operating procedures should apply to operators of State aircraft. Specifics should be taught and monitored in accordance with approved training programs.

- A. Federal and State Aviation Regulations will be adhered to during all phases of flight, except in an emergency.
- B. Aircraft manufacturer's operating handbooks and checklists will be followed for performance data computations, preflight/postflight inspections, normal procedures, emergency procedures, systems operations, weight and balance computations, handling, servicing and maintenance.
- C. Pilots in command have overall responsibility for assigned flights. They may delegate tasks to their copilots, if applicable, however, overall responsibility remains that of the pilot in command.

- D. At the pilot in command's discretion, copilots may be directed, if qualified in the aircraft, to compute performance data, preflight aircraft, file flight plans, operate aircraft radios to include receiving and transmitting radio calls, assist the pilot in command with navigational equipment and assist in passenger loading, briefing and debarking. The second in command may make takeoffs, fly enroute, fly approaches and make landings from the "Captain's" seat, providing he has been properly trained and certified and the pilot in command is fully qualified to operate the aircraft from either seat. An entry will be made on the Pilot Qualification Certificate designating pilots qualified to operate the aircraft from either seat. A similar letter will be published identifying copilots who are qualified to perform the aforementioned maneuvers. Copies of these letters will be placed in each identified pilot's/copilot's training folder.
- E. Whenever two qualified pilots in command are assigned to a flight or operation then management authority must identify one of them as pilot in command for the entire flight or for each segment (leg) of the trip. Normally the pilot in command will occupy the "Captain's" seat and he/she will submit his/her name on the FAA flight plan in that capacity. Agencies may identify pilots to act as pilot in command from the co-pilot's seat providing the pilot involved has been trained and is certified on the Pilot Qualification Certificate to act as pilot in command from that position.

Switching (alternating) of seats (command responsibility) is permissible when two qualified pilots in command are on board, however, the transfer of responsibility must be fully understood by both pilots the aforementioned flight plan procedures complied with. The pilot who moves to the "Copilot's" seat will then assume second in command responsibilities. In this case, the management authority must assign a pilot in command for flight preparation/coordination procedures and the first segment or leg of the trip.

Designated instructor or evaluation pilots will normally occupy the copilots seat and act as pilot in command whenever

instructing or fulfilling assigned flight evaluation responsibilities.

3.102 FLIGHT DUTY TIME

To enhance flight safety, it is important that flights be scheduled in a manner that precludes excessive fatigue of the flight crews. Particular attention must be given to the number of duty hours during a given flight period, the number of flight hours during a duty period, and rest time between flight duty periods. Maximums should be set up in each of these categories by each agency.

3.103 PILOT PROFICIENCY

Personnel authorized to act as pilot of aircraft owned or leased by the State of Louisiana shall maintain a level of proficiency that will insure the ability to operate State aircraft in all normal flight conditions and cope with emergency situations that may be encountered. A continuous training program is necessary to provide the skill level required for the specific mission of each pilot.

Each department utilizing State aircraft shall work with the State Director of Office of Aircraft Services, or a person designated in his/her behalf, to design a training program that will accomplish the desired results.

Training shall include a ground school review of aircraft systems, normal procedures, emergency procedures and applicable FAA and State Regulations. A written test can be given following the ground school portion of the training. Factory schools and simulators will be utilized to the maximum extent, where available. Ground school training should be conducted on, at least, an annual basis.

Flight training and annual flight check shall be administered to each pilot of State aircraft. These check rides will be administered by an authorized check pilot designated by the State Director of Office of Aircraft Services.

Agencies may conduct flight checks using agency Chief Pilots if their overall training program has been approved by the State Director of Office of Aircraft Services.

3.104 PILOT INFORMATION FILE

A pilot information file will be maintained at the Agency's flight operations which will contain all temporary and/or proposed changes to the Flight Operations Manual. Other information pertaining to the State's Flight operations will be placed in this file.

Mandatory items will be so identified and forwarded to all agency pilots who are under the supervision of the Agency Chief Pilot. Other items general in nature may, at the Chief Pilots discretion, be forwarded to pilots under his supervision.

3.105 PUBLICATIONS

The following publications should be maintained by the Agency Flight Operations and management personnel should be thoroughly familiar with the contents of each publication. Necessary maintenance publications will be listed in the maintenance section of this manual and will be maintained in the maintenance administrative section.

- A. Federal Aviation Regulation (FAR) Part I Definitions and Abbreviations.
- B. FAR Part 61 - Certification: Pilots and Flight Instructors.
- C. FAR Part 91 - General Operating and Flight Rules
- D. FAR Part 97 - Standard Instrument Approach Procedures
- E. Airmen's Information Manual
- F. Aircraft and Engine Manufacturers Operations Manuals
- G. Agency Flight Operations Manual
- I. Hazardous Material Manuals CFR 49 Subchapter C(171), Louisiana Department of Public Safety Hazardous Materials and Waste Regulations.

3.106 FLIGHT PREPARATION

All pilots who operate State aircraft will be familiar with all aspects of a proposed flight. In order to accomplish a comprehensive pre-plan, pilots should report to the airport at least one hour prior to the scheduled departure time. This time will vary depending on route, distance, weather, and aircraft complexity. The following checklists may be used as a guide to insure knowledge of pertinent flight information.

- A. Passengers -numbers and names.
- B. Route to be flown (check points, towers in route, alternates).
- C. Departure, enroute, and destination airport weather and forecasts.
- D. Status of navigation facilities and aids to be used.
- E. Instrument departure routes and procedures (SIDS).
- F. Fuel requirements.
- G. Type of enroute terrain and obstruction hazards.
- H. Knowledge of destination airport.
- I. Minimum safe altitudes or flight levels.
- J. Instrument approach and missed approach procedures for destination airport and alternate.
- K. Aircraft weight and balance data.
- L. Notams.
- M. Takeoff and landing distance requirements.
- N. Fuel availability at destination.
- O. Determination of transient facilities to be used.

- P. Aircraft security arrangements if required.
- Q. Aircrew housing/ground transportation if required.
- R. Maintenance status of aircraft (deferred items, inspections due, etc.).
- S. Aircraft clean and provisioned as required.

3.107 PASSENGER MANIFESTS

A passenger manifest will be completed for each flight or series of flights. This information is of critical importance in case of accident or emergency. Disposition of manifests after trip completion will be determined by the agency operating the aircraft.

3.108 WEATHER BRIEFINGS

The pilot in command is responsible for obtaining a weather briefing prior to all flight operations, either VFR or IFR. The briefing may be obtained via:

1. Telephone from FSS on National Weather Service.
2. Radio or transcribed weather broadcasts (TWB).
3. Where possible, a personal weather briefing from an approved weather station, FSS or any other source approved by the FAA.
4. Responsible observers at the destination(s) by telephone or radio.
5. Personal contact with other pilots or FAA issued PIREPS.

Regardless of how the weather briefing is received, it should contain the following areas of information:

1. Adverse weather and turbulence.

2. Synopsis of current weather.
3. AIRMETS, SIGMETS
4. Surface analysis over flight path.
5. Enroute forecast and terminal weather.
6. Destination forecast and current weather.
7. Departure forecast and current weather.
8. Alternate (if required) forecast and current weather.
9. Winds and temperature aloft.
10. NOTAMS
11. PIREPS

3.109 TAKEOFF WEATHER MINIMUMS (AIRPLANES)

State aircraft will not depart unless landing minimums exist at the departure airfield or a suitable alternate airfield is available within thirty (30) minutes flying time. When a takeoff alternate is required, air carrier takeoff minimums will be used, if available, or 1/2 mile visibility. In all cases, the final decision on whether to depart or not will be made by the pilot in command of the aircraft involved.

3.110 LANDING WEATHER MINIMUMS

Instrument approach procedures and weather minimums are established by the Federal Aviation Administration. All State employed pilots operating aircraft on State business shall use the approach procedures approved for the destination airport, when an instrument approach is necessary.

3.112 FROST, SNOW, AND ICING

No State aircraft or helicopter may take off that has frost, snow, or ice adhering to any propeller, windshield, or powerplants installation, or to an airspeed, altimeter, rate of climb, or flight attitude instrument system; or snow or ice adhering to the wings or stabilizing control surfaces. Unless an aircraft has ice protection provisions that meet the requirements in Section 34 of Special Federal Aviation Regulation No. 23 or those for transport category aircraft type certification, no pilot may fly:

- A. Under IFR into known or forecast moderate icing conditions.
- B. Under VFR into known light or moderate icing conditions unless the aircraft has functioning de-icing or anti-icing equipment protecting each propeller, windshield, wing, stabilizing or control surfaces, and each airspeed, altimeter, rate of climb, or flight attitude instrument system.
- C. Into known or forecast severe icing conditions.

3.113 SEVERE WEATHER AND WEATHER DETECTION DEVICES

Flights into areas of severe weather will be avoided to the maximum extent possible. When flight is necessary into areas reporting thunderstorms, icing, turbulence, etc., then avoidance will be accomplished using visual means, airborne radar and air traffic control assistance. If thunderstorm penetration is unavoidable, pilots will utilize the procedures for turbulent air penetration which are recommended by the aircraft manufacturer.

An operable weather detection device must be installed in the aircraft if operation is planned into areas of known or forecast thunderstorm activity exceeding scattered where avoidance may be accomplished by visual means.

3.114 INSTRUMENT OPERATIONS

- A. Flight under "Instrument Flight Rules" is permitted when:
 - 1. The aircraft is FAA approved and equipped for instrument flight.

2. The crew is qualified and current for the type operation planned.
3. The flight is conducted in accordance with rules required by the FAA and Agency Operations Manual.

3.115 HELICOPTER OPERATIONS

- A. Helicopters shall be operated in accordance with the Helicopter Association International (HAI) "Fly Neighborly" policy when possible. Pilots should be aware of public opinion and shall conduct their activities in a safe and professional manner at all times.
- B. Helicopters shall be operated to provide rotor (tail and main) clearance of 1/3 rotor diameter from any obstructions. An obstruction is defined as an object that, by its location, presents a hazard to helicopter operations.
- C. Helicopter operations of a specialized nature such as external load, demonstrations, rescue, multi-ship, law enforcement, medic-evac etc. may be accomplished, when necessary, by pilots who have been properly trained and have been approved by the Agency Chief Pilot. Any personnel who are involved in the specialized activities, other than aircrew members, shall be briefed prior to the mission on the correct procedures to be utilized and consideration shall be given to public protection.

3.118 REFUELING OF AIRCRAFT

- A. The pilot in command shall be responsible for ensuring that the proper type and quantity of oil, fuel and fuel additives are used in the aircraft. The PIC may delegate this duty to another qualified crewmember, however, the pilot in command still retains the responsibility.
- B. Refueling procedures shall be established and made a

part of the Agency Flight Manual in accordance with FAA A.C. 150/5230-4 and NFPA-407.

- C. Aircraft will not be refueled with the engines operating. Turbine powered helicopters may be "Hot Refueled" provided:
 - 1. Mission urgency is involved.
 - 2. The pilot remains at the flight controls.
 - 3. Proper aircraft grounding is accomplished.
 - 4. An adequate fire extinguisher is readily available.
 - 5. The refueler (nozzle operator) is trained in "Hot Refueling" operations.

3.119 WEIGHT AND BALANCE

- A. All aircraft will have a current operating weight and center of gravity recorded in the Aircraft Flight Manual.
- B. It is the pilot in command's responsibility to ensure that the aircraft is properly loaded in accordance with the weight and balance data in the Agency Flight Manual. The actual supervision of loading may be delegated, but the PIC is responsible for checking to see that the aircraft is properly loaded prior to departure. Average passenger weights and standard weights of items may be used in accordance with published tables. This, however, does not relieve the pilot of obtaining the actual weights when, in his opinion, the actual weights are greater than average published tables.

Cargo will be loaded in such a manner as to not restrict the use of, or access to, any required normal or emergency exit. Cargo will not be carried above seated passengers and all cargo and baggage will be secured in such a manner as to prevent shifting under all normal operating

conditions.

Baggage compartment floor-loading weight limits shall not be exceeded.

3.120 RESPONSIBILITY FOR DETERMINATION OF AIRCRAFT AIRWORTHINESS (Pilots)

The final responsibility for determining aircraft airworthiness rests with the pilot in command. In addition to the preflight inspection, it is the pilot in command's responsibility to check the Aircraft Discrepancy Record for the following items to determine the aircraft's condition prior to flight:

- A. Compliance with all AD's and mandatory Service Bulletins.
- B. That the planned flight will not exceed the time remaining for time/date maintenance requirements.
- C. That all inspection "due dates" hour or cycle limits are carried forward and not past due.
- D. That maintenance discrepancies have been corrected or, if allowed by the minimum equipment list, deferred. All Entries shall be signed by a certified mechanic approving the repair and returning the aircraft to service.
- E. That the discrepancies that have been deferred do not prevent the aircraft from being suitable for this flight or series of flights.
- F. That all required equipment and required certificates, manuals and licenses are on board.

3.121 AIRCRAFT DISCREPANCY RECORD

Upon completion of daily preflight, all mechanical, electrical and

electronic discrepancies must be listed on the Aircraft Discrepancy Record (ADR). This should be given to the Chief of Maintenance before the flight. A licensed A & P mechanic (State or Contract) will accomplish corrective action or, if unable to complete the repairs or, if the item is not a safety of flight item, may defer the repair. A copy of the ADR with deferred items must be attached to the daily flight log. If the discrepancy requires corrective action before another flight then a sign should be attached to the inside of the windshield advising that "*Aircraft should not be flown, see discrepancy record*".

3.122 MINIMUM EQUIPMENT LIST

All systems, components and equipment (except in compliance with approved Minimum Equipment Lists) must be in operating condition prior to dispatch of the aircraft.

Aircraft that do not have minimum equipment list shall comply with the applicable FAA requirements for the planned mission.

3.123 DEFERRED DISCREPANCIES

Discrepancies that cannot be corrected before dispatch and do not affect the airworthiness or safety of the flight may be deferred by maintenance. A minimum equipment list should be provided on State aircraft to assist maintenance and pilot personnel in determining what may be deferred. Pilots should be alert to items which may have an adverse effect when combined.

The deferred list should be checked weekly by the Chief of Aircraft Maintenance to prevent the accumulation of items. Agency pilots shall advise their Chief of Aircraft Maintenance of any deferred items on their aircraft on a weekly basis.

Every effort should be made to keep the deferred items to a minimum.

3.124 FLIGHT FOLLOWING/FLIGHT PLANS

A. A flight plan will be filed for all flights. As a minimum, flight

plans should include the following information:

1. Aircraft identification
 2. Point and time of departure
 3. Destination and alternate
 4. Estimated time of arrival
 5. Total number of persons aboard.
 6. Fuel on board.
- B. Whenever practical, an FAA flight plan will be filed.
- C. If it is impractical to file an FAA flight plan, an internal flight plan will be filed with a responsible employee or designated person within the department's organization. This person should be on duty for the entire duration of the flight. If this is not practical, additional personnel may be designated as necessary to ensure that someone is aware of the flight's progress. This flight plan will be supplemented with detailed instructions as how and who to give notification if the aircraft becomes overdue.

3.125 DAILY INSPECTIONS

Some aircraft operated by the State require daily inspections. (Example: Bell 206 series helicopters.) A properly trained pilot may conduct and sign off a daily inspection, however, a FAA certified A & P mechanic must conduct the weekly inspection.

3.126 PREFLIGHT INSPECTIONS

- A. The pilot in command assigned to the flight will:
1. Check the aircraft maintenance discrepancy record and the maintenance due information to determine

the status on the aircraft. The pilot in command is responsible for determining that deferred items will not affect the safety of the flight.

2. Perform a preflight inspection of the aircraft as outlined in the aircraft flight manual.
 - a. It is imperative that both fuel and oil be checked before the first flight of the day and at approximate intervals thereafter. Oil quantity should be checked visually, consumption monitored and noted in the Discrepancy Record if excessive oil is being used.
 - b. If ground activity, (i.e., snow removal, aircraft wash, etc.) has taken place in the vicinity of the aircraft or severe weather phenomenon occurred since the aircraft was last operated, special attention should be given to checking for possible damage.
 - c. Required items must be on board.

NOTE: The second in command (if applicable) may aid the PIC in the accomplishment of the preflight as requested.

3.127 WALK-AROUND INSPECTIONS

A walk-around inspection should be accomplished between flights. General Condition of the aircraft should be noted. If fueling has been accomplished, a check of the fuel caps should be included.

3.128 EMERGENCY EQUIPMENT

The following emergency equipment (in good working order) will be carried on board or installed in State Aircraft.

- A. At least one portable fire extinguisher (Halon type).

- B. One emergency locator transmitter.
- C. One first aid kit.
- D. One emergency signal kit.
- E. One crash axe (pressurized aircraft only).

All emergency equipment shall be inspected by maintenance on a regular interval and have a tag showing the due date of the next inspection. Pilots shall check emergency equipment as a part of the preflight inspection to ensure that the equipment is on board and has a current inspection date.

3.130 PASSENGER BRIEFING

The pilot in command will ensure, prior to takeoff, that each passenger has been briefed on the following items:

- A. The use of seatbelts.
- B. The location and operation of normal and emergency exits.
- C. Location and operation of emergency and, if applicable, survival equipment.
- D. If the flight will involve operations at cabin altitudes above 12,000' MSL normal and emergency use of oxygen equipment.
- E. If the flight involves extended over-water operations or water takeoffs and landings, ditching and personal flotation equipment.
- F. Smoking and no-smoking rules.
- G. Special information relating to handicapped persons, if applicable.

3.131 USE OF SEAT BELTS

No person may take off in an aircraft (except a free balloon that incorporates a basket or gondola) unless the pilot in command of that aircraft ensures that each person on board is briefed on how to fasten and unfasten that person's safety belt.

3.132 OXYGEN REQUIREMENT

For the purpose of this manual, the pilot requirements for oxygen use shall be as stated in FAA FAR 91:32. Any other regulation applicable to the aircraft certification or operational conditions shall be followed as well.

3.133 PORTABLE ELECTRONIC DEVICES

State employed pilots will not carry portable electronic devices belonging to passengers that may cause interference with navigation and communications systems. This does not apply to portable voice recorders or other devices that the pilot of the aircraft has determined will not interfere with navigation and communications systems.

3.134 SMOKING

Smoking is prohibited during ground operations, takeoff and landing, in lavatories (if available), when fuel fumes are present or when so directed by the pilot in command.

3.136 NOISE ABATEMENT

Due to the sensitivity of developed areas in the airport environment, noise abatement takeoff and landing procedures shall normally be employed unless the requirements for safe operations of the aircraft otherwise dictate.

3.137 ADMISSION TO THE COCKPIT

State officials, guests and employees may be admitted to the cockpit

and may occupy the copilots seat as a passenger at the discretion of the pilot in command. It will be the pilot in command's responsibility to brief the passenger who does occupy the copilots seat regarding what not to touch or manipulate during flight. The safety of the flight is of prime concern and the pilot in command must not allow this to be compromised for any reason.

3.138 FLIGHT CREW MEMBERS AT DUTY STATIONS

Pilots are to remain at their assigned duty stations, in their seats with seat belts fastened, unless the temporary absence of one member of a two-pilot crew is necessitated by other flight duties or physiological necessity.

3.139 USE OF CHECKLISTS

All State operated aircraft shall carry, and flight crews shall use, an approved checklist appropriate for that specific aircraft. These checklists shall be reviewed periodically to ensure that they are current and up to date.

3.142 POSTFLIGHT INSPECTION

- A. At the completion of the last flight of the day, the PIC (or Second in Command if so assigned) shall make a walk-around inspection of the aircraft, noting any oil or fuel leaks or abnormal wear or damage to landing gear, skids, tires, wheels, fuselage, wings, props/rotors.
- B. Discrepancies discovered during the postflight inspection will be written-up in the Aircraft Discrepancy Record. The PIC will notify the Chief of Aircraft Maintenance at Baton Rouge, or Agency Maintenance Chief, if there is any question as to the airworthiness status of the aircraft.

3.143 TIE DOWN AND SECURING AIRCRAFT

- A. The PIC is responsible for safety and protection of the aircraft and equipment assigned to him. Each pilot must, to

the maximum extent practicable, ensure that the aircraft is protected against damage by ground vehicles, weather or other outside sources. Aircraft are to be locked at all times when no crewmembers are in the immediate vicinity (able to see the aircraft).

- B. If the aircraft is to remain overnight or for an extended period, the PIC will ensure that:
 - 1. The aircraft is chocked (if wheel-type landing gear). Helicopters will be tied down.
 - 2. Flight-control locks, plugs, and covers will be installed. Helicopter blades will be tied down if aircraft is not hangered.
 - 3. The aircraft will be hangered or parked in a secure, well-lighted area if possible.
- C. When freezing precipitation is anticipated aircraft should be hangered or wing covers (if available) should be used. Liquid containers and any items that could freeze and cause damage should be removed from the aircraft.
- D. If strong winds are present or anticipated, aircraft should be parked heading into the wind. The pilot should be alert to any severe weather forecasts and arrange hangar storage or possible relocation of the aircraft, if forecast conditions warrant.
- E. Pilots will ensure that all ashtrays and trash containers are empty before leaving the aircraft overnight or for extended periods.

3.144 SECURITY

- A. Aircraft will be locked at all times when a qualified crewmember is not on board or near and observing the aircraft to assure that no unauthorized person is able to

enter or come in contact with the aircraft.

- B. Any unknown person(s) observed to be loitering around the aircraft should be considered suspicious and his presence should be brought to the attention of the proper airport authorities.
- C. Flight crewmembers performing preflight inspections should be familiar with the types and appearance of explosives that could be placed in or on the aircraft.
- D. If maintenance is performed on a State aircraft away from home base, the pilot will be responsible for properly inspecting the aircraft prior to flight to determine that all is in order.
- E. The Chief of Aircraft maintenance is responsible for aircraft security while the aircraft is on the ground at the Baton Rouge facility and will ensure that all unauthorized persons are kept out of and away from aircraft either in the hangar or on the ramp. Agencies will designate someone to be in charge of security of aircraft at other locations throughout the state.
- F. The pilot is responsible for aircraft fueling being properly accomplished. He/She may delegate this responsibility to a qualified crewmember, however, in all circumstances, fueling will be observed by a flight crewmember or by qualified maintenance personnel.
- G. Packages, papers, luggage, cargo, etc. are not to be placed on board the aircraft until they have been positively identified by the owner-passenger and have been accepted and approved by the pilot.
- H. Unauthorized passengers will not be carried on any flight. All passengers are to be approved by the Sponsor of the trip or his designated representative. Crewmembers are to report, to their pilot in command, cases of hitchhiking

requests where it appears the requester obtained flight data in advance.

- I. Aircraft will be parked in lighted areas where they can be kept under surveillance by airport security whenever possible.

3.145 AIRCRAFT FLIGHT LOG

A daily flight log should be filled out on each aircraft and maintained in a file. See the forms section for a sample of this form.

4.100 MAINTENANCE OPERATIONS

4.101 GENERAL

State of Louisiana aircraft shall be maintained in such a manner as to enhance flight safety and to minimize unscheduled down time. All maintenance is to be performed according to FAA Regulations Part 43 and State Regulations.

Airworthiness Directives, mandatory service bulletins and corrective action concerning unairworthy conditions, as noted by the Director of Aircraft Services, Chief Pilot or Chief of Aircraft Maintenance, shall take precedence over routine maintenance, when required and shall be properly recorded in the permanent aircraft records.

All agencies operating aircraft should utilize existing State Maintenance facilities as per Act No. 62, R.S. 39:360(C) of June, 1988. When contract maintenance is required, the same or more stringent inspection criteria that is required by the central maintenance unit, The Office of Aircraft Services, is to be followed. Contract maintenance companies must be F.A.A. Certified Repair Stations or otherwise properly certified, trained and experienced on aircraft and components of the same category, class, type, and model. The Office of Aircraft Services shall inspect or otherwise determine that outside maintenance contractors meet the State's quality standards prior to utilizing the company.

All maintenance performed shall be conducted or directly supervised by qualified personnel who have received appropriate training for the assigned task. Manufacturer's recommended procedures shall be utilized and proper tooling shall be used to accomplish the work.

All required entries in the aircraft records, inspection forms, and other record keeping systems shall be complete before releasing the aircraft for service.

4.102 MAINTENANCE REFERENCE LIBRARY

The Office of Aircraft Services Maintenance Section will maintain the publications listed below. Maintenance personnel will have these publications available in a central location in the Maintenance Section.

A.1 FEDERAL AVIATION REGULATIONS

1. Part 21 Certification Procedures for Products and Parts
2. Part 23 Airworthiness Standards: Normal, Utility Aircraft
3. Part 27 Airworthiness Standards: Normal Category Rotorcraft
4. Part 33 Airworthiness Standards: Aircraft Engines
5. Part 35 Airworthiness Standards: Propellers
6. Part 39 Airworthiness Directives (AD's)
7. Part 43 Maintenance, Preventive, Rebuilding and Alteration
8. Part 45 Identification and Registration Marking
9. Part 63 Certification: Flight Crewmembers other than Pilots

10. Part 65 Certification: Airmen other than Flight Crewmembers
11. Part 91 General Operating and Flight
12. 49 CFR Parts 100 197 DOT Hazardous Materials Regulations
13. Part 135 Certification and Operations: Small Aircraft, Commercial Operators and Air Taxi Operators
14. Part 145 Repair Stations
15. Part 183 Representatives of the Administrator

A.2 FAA ADVISORY CIRCULARS

1. Series 20 Aircraft
2. Series 43 Maintenance
3. Series 60 Airmen

A.3 MISCELLANEOUS FAA DOCUMENTS

1. Aircraft Specification (for aircraft concerned)
2. Aircraft Engine Specification (for aircraft concerned)

A.4 OTHER MANUALS AND BULLETINS

1. Aircraft Manufacturer's Bulletins and Service letters
2. Aircraft Manufacturer's Maintenance and Parts Manuals
3. Similar manuals as applicable to engines, accessories and avionics

A.5 AIRWORTHINESS DIRECTIVES

A current list (updated as rapidly as possible) of all Airworthiness Directives - including airframe, powerplants, appliances, equipment, instruments, electronics, and avionics should be maintained by the Flight Maintenance Office in Baton Rouge.

Each aircraft shall have, as a part of the aircraft logbook, a section entitled "Historical Record - AD Note Compliance". This record denotes the AD number, subject, reference, method of compliance, date and/or time of compliance, next inspection/action due, and the signature of the person who signed for compliance.

A.6 SERVICE BULLETINS/SERVICE LETTERS

The pilot/mechanic at a remote location will contact the Office of Aircraft Services in Baton Rouge should interpretation assistance be required regarding these publications.

4.103 OVERHAUL TIME LIMITS (TBO)

A.1 Overhaul limits shall correspond to those recommended by the aircraft/component manufacturers.

A.2 Extension of TBO shall be approved by Chief of Maintenance in Baton Rouge

4.107 REQUIRED INSPECTION ITEMS

The items listed below are considered required inspection items and must be properly performed by a qualified A & P mechanic and inspected by a FAA designated inspector before the aircraft can be returned to service.

1. Anytime a rotating component (helicopter) is removed and replaced, repaired, or disconnected.

2. Whenever work is accomplished on the hydraulic, fuel, oil, or pneumatic system.
3. Whenever any flight control is repaired, reconnected, or rerigged.
4. Whenever a power plant, gear box, or propeller is removed and replaced.
5. When a major airframe component is removed and replaced.
6. Whenever a power plant undergoes an accessory component replacement or repair.
7. Whenever any piece of navigation equipment is removed and replaced.
8. Whenever a major repair or alteration is accomplished.

4.108 INCOMPLETE MAINTENANCE

A.1 Any incomplete work or interruptions in maintenance require that a red tag be attached to the pilot's control wheel stick or cyclic grip, labeled "DANGER AIRCRAFT GROUNDED - DO NOT START ENGINE". In addition, whenever work is stopped, for any reason, on aircraft a Work Stoppage Report shall be completed and attached to the aircraft paperwork and logbook. Any parts removed from this aircraft during period of work stoppage shall be listed on the report and this form shall become a part of the aircraft records.

A.2 When the pilot in command assigned to an aircraft discovers that any maintenance or component or special inspection is due before the estimated end of the planned or series of flights, or when the daily inspection has not been properly signed off, the aircraft shall not be accepted for dispatch and shall be grounded immediately.

4.110 MAINTENANCE TEST FLIGHTS

Operational check flights will be required whenever any of the following conditions occur:

- a. Whenever a major alteration or repair is performed which may adversely affect the flight characteristics of the aircraft.
- b. Whenever maintenance is performed on the flight control system.
- c. Whenever a power plant or gear box is removed and replaced.

Upon successful completion of the flight, the pilot in command is responsible for entering the following information in the aircraft records:

- a. A statement releasing the aircraft to operational status.
- b. The time and date released.
- c. The pilot's name and certificate number.

If the aircraft is not released, a list of discrepancies noted during the test flight is required. The pilot shall sign this list and enter his certificate number and the date and time.

NOTE: Maintenance check flights should be flown by pilots who are adequately trained and experienced and are familiar with the proper test procedures to be used. No passengers will be carried on test flights. Technicians who have need to be present may be carried on test flights.

4.111 AIRWORTHINESS DETERMINATION (Maintenance)

An aircraft will be considered airworthy by Louisiana Aircraft

Maintenance Facility when a properly licensed and trained State, contract or other specially authorized mechanic or inspector has signed the "Daily Inspection," the Aircraft Discrepancy Record or the Aircraft Log Book section as required. The sign-off shall include the mechanic's name, certificate number, and the date.

4.112 MALFUNCTION AND DEFECT REPORTING

The State supports the FAA's Malfunction and Defect Reporting System. The Director of Aircraft Maintenance should utilize the FAA Report Form 8010-4 to report items as outlined in FAR-135.415

4.114 FUEL QUALITY CONTROL

1. Fuel dispensed at state-owned or operated locations shall be received, stored and dispensed in accordance with the applicable procedures outlined in FAA A.C. 150/5230-4.
2. A checklist shall be used to record all required fuel quality control operations (sumps, filter change dates, differential pressure, etc.). All items must be signed off by the person accomplishing the task. These fuel quality control records shall be maintained for a period of two years.
3. Flight crewmembers shall be alert as to the type and quality of fuel placed in State Aircraft.

4.115 TAGGING OF PARTS

In order to provide a method to denote the status of parts and components used in the maintenance and overhaul of State Aircraft, a system of tagging should be established and patterned after the system used by FAA approved repair stations.

4.116 GROUND SUPPORT EQUIPMENT

The ground support equipment (tugs, power units, etc.) shall be maintained and regularly inspected to ensure that all systems and parts required for the safe operation are functional. A checklist shall be

used as the basis of the required maintenance and inspections. The Chief of Aircraft Maintenance is responsible for the condition and security of the ground support equipment, however, he/she may delegate the actual work to others while retaining overall responsibility. Agencies may delegate this responsibility in Agency operated facilities. Contract facilities should be monitored for upkeep of ground support equipment.

Personnel who use the ground support equipment must be instructed in the proper uses and safety procedures applicable to that equipment. A record shall be placed in each employee's file showing the receipt of such instruction, the date received and the instructor's signature.

5.101 PILOT TRAINING PROGRAM

Agencies will compile and submit a pilot training program for their Agency to the Division of Administration Director of the Office of Aircraft Services for his/her approval. The pilot training program should contain initial and recurring training which includes air operations as well as ground school.

6.100 ACCIDENT REPORTING:

A. Definition of an accident - An accident is defined as any incident in which the aircraft comes in contact with another aircraft, object, person, or ground which results in death, personal injury, and/or property damage, regardless of who was injured, what was damaged or to what extent, where it occurred or who was responsible.

B. When to report an accident - The first consideration after experiencing an accident is the preservation and protection of human life. All flight crew action will be directed toward this end. Pilots will refer to NTSB Part 830.5 which pertain to aircraft accidents, incidents, overdue aircraft and safety investigations.

C. How to report an accident - In addition to FAA forms or Agency forms, the pilot will complete the AARF-1 Office

of Risk Management Aircraft Accident Investigation form and forward to the Office of Risk Management Claims Section within 24 hours. If the pilot is unable to complete this form then his supervisor should complete the form for him. If injury or property damage is evident, contact the Claims Section of ORM by phone as soon as possible.

7.100 FORMS:

- A. Accident reporting form AARF-1
- B. Pilot History Form
- C. Aircraft Discrepancy Record
- D. Aircraft Daily Log

8.100 DEFINITIONS:

- A. Agency Head: The highest authority within a subsidiary of a department.
- B. AI: FAA designation for Aircraft Inspector
- C. A & P: FAA designation for Aircraft & Power plants mechanic.
- D. FAA: Federal Aviation Agency
- E. State Aircraft: Any aircraft owned or leased by the State of Louisiana
- F. Chief Pilot: Pilot designated by Agency to handle duties.
- G. Flight: Person designated by Agency Dispatcher to dispatch Flights and maintain records.
- H. PIC: Pilot in Command
- I. SIC: Second Pilot in Command

- J. FAR: Federal Air Regulations
- K. NTSB: National Transportation Safety Board
- L. ORM: Office of Risk Management
- M. VFR: Visual Flight Rules
- N. IFR: Instrument Flight Rules
- O. AD: Airworthiness Directive
- P. M.E.L.: Minimum Equipment List
- Q. ADR: Aircraft Discrepancy Record
- R. Aircraft Services Director: Person designated in Division of Administration as highest authority over flight operations.
- S. R. S. 39:360(C): Policy for use of state-owned aircraft; criteria; maintenance.

9.100 APPENDICES

NOTE: Appendices are exceptions requested by Agencies that have been approved by the Director of the Office of Aircraft Services in the Division of Administration.